

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

1. A torque transmission mechanism comprising:
 - an outer body having an inner surface defining a
 - 5 cavity therein;
 - an inner body having an outer surface, the inner
 - body being located at least partially inside the cavity
 - and able, in use, to rotate therein;
 - a plurality of rollers each located between the
 - 10 outer body and the inner body;
 - wherein there is provided one or more cam
 - surfaces;
 - wherein rotation of the inner body relative to
 - the outer body in a first direction is substantially
 - 15 unimpeded by the rollers, but rotation of the inner body
 - in the opposite second direction is prevented or impeded
 - by interaction of at least two rollers with said one or
 - more cam surfaces;
 - wherein one of the rollers which interact with
 - 20 the one or more cam surfaces is a larger roller which is
 - of a larger diameter than at least one other smaller
 - roller which interacts with one of the one or more cam
 - surfaces;
 - wherein one of the outer body and the inner body
 - 25 is formed with a recess therein, and the larger roller is
 - located in said recess; and
 - wherein the body in which the recess is formed
 - has a shape which, excluding the effect of the recess, has
 - a non-uniform wall thickness, and the part of the body in
 - 30 which the recess is formed includes a part with a greater
 - wall thickness excluding the effect of the recess.
2. A tool including a head wherein the head includes
- or consists of a torque transmission mechanism as claimed

in claim 1.

3. A tool including a one-way torque transmission mechanism in a head thereof, which in use imparts torque from a driving portion to a drive element thereof, wherein
5 said tool includes an attachment portion for attachment of a drive element of another tool, so that the drive element of the other tool may be forced so as to impart torque to the drive element of said tool.

4. A torque transmission mechanism comprising:
10 an outer body having a cavity therein;
an inner body located at least partially within the cavity;

a mechanism for controlling relative rotation of the inner body and outer body so that, in use, rotation of
15 the inner body relative to the outer body in the first direction may be substantially unimpeded, but rotation of the inner body relative to the outer body in the opposite second direction is prevented or impeded;

wherein a cover is provided which extends between
20 the inner body and the outer body, said cover being, in use, substantially fixed relative to the outer body; and

wherein one or more seals are provided between the inner body and the cover so as to isolate the mechanism for controlling relative rotation of the inner
25 body and the outer body, from the exterior of the tool.

5. A torque transmission mechanism comprising:
an outer body having an inner surface defining a cavity therein;

an inner body having an outer surface, the inner
30 body being located at least partially inside the cavity and able, in use, to rotate therein;

a plurality of rollers each located between the outer body and the inner body;

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wherein there is provided one or more cam surfaces;

wherein rotation of the inner body relative to the outer body in a first direction is substantially
5 unimpeded by the rollers, but rotation of the inner body in the opposite second direction is prevented or impeded by interaction of at least two rollers with said one or more cam surfaces;

wherein at least one of the rollers which
10 interact with the one or more cam surfaces is a larger roller which is of a larger diameter than at least one other smaller roller which interacts with one of the one or more cam surfaces;

wherein the interaction of the rollers with the
15 cam surface(s) which corresponds to prevention or impeding of the rotation in the second direction corresponds to each of the rollers being forcibly engaged between the inner and outer bodies so as to transmit torque between said inner and outer bodies; and

wherein as the mechanism changes from a state in
20 which the rollers are not forcibly engaged between the inner and outer bodies to a state in which the rollers are forcibly engaged between the inner and out bodies, the rollers do not all become forcibly engaged between the
25 inner and outer bodies simultaneously.

6. A tool including a head, wherein the head includes or consists of a torque transmission mechanism comprising:

an outer body having an inner surface defining a
30 cavity therein;

an inner body having an outer surface, the inner body being located at least partially inside the cavity and able, in use, to rotate therein;

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a plurality of rollers each located between the outer body and the inner body;

wherein rotation of the inner body relative to the outer body in a first direction is substantially
5 unimpeded by the rollers, but rotation of the inner body in the opposite second direction is prevented or impeded by interaction of at least two rollers with the inner and outer bodies; and

wherein at least one of the rollers has a larger
10 diameter than at least one other roller.

7. A torque transmission mechanism comprising:

an outer body having an inner surface defining a cavity therein;

an inner body having an outer surface, the inner
15 body being located at least partially inside the cavity and able, in use, to rotate therein;

a plurality of rollers each located between the outer body and the inner body;

wherein rotation of the inner body relative to
20 the outer body in a first direction is substantially unimpeded by the rollers, but rotation of the inner body in the opposite second direction is prevented or impeded by interaction of at least two rollers with the inner and outer bodies; and

25 wherein at least one of the rollers is generally spherical.